



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES

Memphis Environmental Field Office
8383 Wolf Lake Drive
Bartlett, TN 38133
Phone 901-371-3000 Statewide 1-888-891-8332 Fax 901-371-3170

April 22, 2015

Mr. Rick McClanahan
Director of Utilities and Engineering
City of Bartlett
3585 Altruria Road
Bartlett, TN 38135

Re: Compliance Evaluation Inspection
 Bartlett Sewage Treatment Plant (STP) #1
 NPDES Permit No. TN0066800
 Shelby County
 Bartlett STP Biosolids Operation and Management
 State Operation Permit For Land Application of Biosolids No. TNB066800
 Tipton County

Dear Mr. McClanahan:

On Tuesday, April 7, 2015, Mr. Eddy Bouzeid with the Division of Water Resources, Memphis Environmental Field Office (DWR/MEFO), conducted a Compliance Evaluation Inspection (CEI) of both the Bartlett Sewage Treatment Plant (STP) #1 and the Plant's Biosolids Operation and Management. Upon arrival at the STP facility, Mr. Bouzeid met with Mr. Larry Gamblin, the Bartlett STP Certified Operator, and stated that the purpose of the inspection was to evaluate the facility's compliance with its National Pollutant Discharge Elimination System (NPDES) and Biosolids State Operating Permit. This was accomplished by reviewing the facility's self-monitoring records and reports and subsequently conducting an inspection of the facility and the land application site. Attached you will find the State Water Compliance Inspection Reports for both permits, which summarize the findings of the CEI. The following are items to note regarding the inspection:

1. The facility reported five exceedances of its permit limits for the period from May 2013 through March 2015. As noted on the DMRs one exceedance in September 2013 was attributed to a lab error and the other exceedances were attributed to heavy rain fall and during the maintenance of one of the clarifiers in September and November 2014.

2. On January 30, 2015, Mr. Bob Odette and Mr. Bouzeid conducted an audit of the Bartlett's biosolids management. During the meeting, Mr. Gamblin stated that the biosolids generated in the fall of 2014 had not been land applied at the Add Van Farms. Mr. Odette advised Mr. Gamblin that the recommended staging period is seven to ten days, and for long term storage, he strongly recommended that Bartlett adhere to the biosolids storage guidance found in EPA 40 CFR 503 rules. In a letter to Mr. Odette dated February 4, 2015, The City of Bartlett proposed covering all biosolids taken to the application site within seven days of delivery with plastic tarp material until ready to apply. Mr. Odette approved the proposal on February 12, 2015.

During the inspection, Mr. Bouzeid and Mr. Gamblin visited the Add Van Farms in Tipton County, the land application site, and confirmed that the biosolids generated in the fall of 2014 have not yet been land applied nor was the area covered. Mr. Gamblin stated that the wet weather had hindered the land application activities. He informed Mr. Bouzeid that the biosolids generated in the spring of 2015 will not be delivered to the land application site until the staged biosolids from the fall of 2014 have been land applied.

The Division strongly recommends that the biosolids that will be delivered to the Add Van Farms land application site be staged no longer than seven to ten days. If the material must be staged longer than this time frame, the material should be covered to restrict the potential movement of pathogens and minimize the mineralization of the biosolids.

3. On January 8, 2015, the Enforcement and Compliance Unit with the Division issued the Bartlett STP a Notice of Violation for several late submittals of DMRs. The DMRs for July, August and October 2014 were postmarked later than 15 days after completion of the reporting period.
4. A review of the annual report revealed that the latitude and longitude for the land application site was not provided. Section 3.4.1 of the general permit, "Contents of the Annual Report", requires that this information be included in the report. Please ensure that future annual reports contain all required information, including but not limited to, the specific latitude and longitude coordinates of the land application location(s).
5. A recent review of the Notice of Intent (NOI) for the biosolids land application received by the Division on June 27, 2014, revealed that the longitude/latitude coordinates were incorrect. Mr. Bouzeid contacted Mr. Gamblin and advised him to resubmit a revised application with the correct coordinates. On April 21, 2015, Mr. Gamblin submitted a revised NOI with the correct coordinates.

Based on the actual land application location please be aware that the runoff from the application site enters Hodges Creek a tributary of Indian Creek. Indian Creek is on the State's 303(d) List of impaired waters for E. Coli and Phosphorous. Please be advised that the land application procedures and the staging operation must be conducted in compliance with Section 3.2.1 of the permit which states in part: "The land application of non-EQ biosolids shall be conducted in a manner that will not cause a violation of any receiving water quality standard from discharges of surface runoff from the land application sites. Non-EQ biosolids shall not be land applied unless all setbacks are

met.” The proper operations and management of the land application site is imperative to ensure that runoff from the site doesn’t not contribute to the impaired status of Indian Creek or cause Hodges Creek to become impaired.

The Division appreciates the cooperation and assistance of Mr. Gamblin during the inspection and the City’s continues efforts to comply with its NPDES and Biosolids State Operation Permit requirements. If you have any questions or comments with regard to the inspection please contact Mr. Eddy Bouzeid at (901) 371-3023 or eddy.bouzeid@tn.gov.

Sincerely,



Joellyn Brazile
Environmental Program Manager
Division of Water Resources
Memphis Environmental Field Office

Enclosures: Compliance Inspection Reports, Photographs

cc: TDEC/DWR/NCO, Enforcement & Compliance
TDEC/DWR/MEFO – File



TDEC - Division of Water Resources

ICIS NPDES Facilities Inspection Report

Facility Data

NPDES ID:	TNB066800	Facility Site Name	Bartlett STP (Biosolids Application Site)		
		Address	5258 Shelter Run Lane, Bartlett, Shelby County, Tennessee		
Permit Eff. Date:	Jul 15, 2014	Permit Exp Date:	Apr 30, 2019	SIC Code:	

Compliance Monitoring Information

Compliance Monitoring Activity Name	Compliance Evaluation (non-sampling) (CEI)				
	* If Bio Monitoring is selected above, select the method used:				
Compliance Monitoring Activity	Evaluation				

Compliance Monitoring Dates/Times

Entry Date/Time (mm/dd/yyyy hh:mm):	4/7/2015 10:00	Exit Date/Time (mm/dd/yyyy hh:mm):	4/7/2015 12:30
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Facility Representatives

Larry Gamblin (901) 385-6451 / Certified Operator	Rick McClanahan (901) 385-6499 / Director of Engineering
On-Site Representative(s) Title, Phone Number	Responsible Official(s), Title, Phone Number

Statute and Section Information

Federal Statute:	CWA - Clean Water Act	State Statute:	Tennessee Water Quality Control Act	
Programs:	NPDES- Base Program (Limits, Reporting, & Schedule)			
Compliance Monitoring Reason:	Core Program			
Compliance Monitoring Agency Type:	State	Agency Name:	TDEC - DWR	
Did EPA assist/ Inspection?	No	Time Physically conducting activity: Days:	1	Hours:
Inspection Type:	State	Compliance Monitoring Action Outcome:		
Lead Agency:	State	Compliance Monitoring Rating Code:		
If Joint Inspection, what was the purpose of the other party?				



Areas Evaluated During Inspection (Check only those areas evaluated)

<input type="checkbox"/> Permit	<input type="checkbox"/> Self - Compliance Program	<input type="checkbox"/> Pretreatment
<input type="checkbox"/> Records / Records	<input type="checkbox"/> Compliance Schedule	<input type="checkbox"/> Pollution Prevention
<input type="checkbox"/> Facility Site Review	<input type="checkbox"/> Laboratory	<input type="checkbox"/> Storm Water
<input type="checkbox"/> Effluent / Receiving Waters	<input type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> Combined Sewer Overflow
<input type="checkbox"/> Flow Measurement	<input checked="" type="checkbox"/> Sludge Handling / Disposal	<input type="checkbox"/> Sanitary Sewer Overflow

Compliance Monitoring Summary

See attached inspection report and/or letter.

EPA and State Representatives

	TDEC/DWR/MEFO (901) 371-3023	Apr 22, 2015
Inspector's Signature	Agency / Office / Phone	Date
	TDEC/DWR/MEFO (901) 371-3025	Apr 22, 2015
Manager's Signature	Agency / Office / Phone	Date

(Note: This form can only be printed to an XPS document, then saved for later use.)

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Resources

Memphis Environmental Field Office, 8383 Wolf Lake Drive, Bartlett, TN 38133

1-888-891-8332 (TDEC)

**Compliance Inspection General State Operation Permit
For The Land Application Of Non-Exceptional Quality Biosolids**

Facility Name: Bartlett STP (Biosolid Application Site)	NPDES Tracking Number: TNB066800
Permit Effective Date: July 15, 2014	Permit Expiration Date: April 30, 2019
Date and Time of Inspection: 4/7/2015	Inspector Name: Eddy Bouzeid

Official Contact Person Name: Rick McClanahan, Director of Utilities and Engineering	
Address: 3585 Altruria Road, Bartlett, TN 38135	Phone Number: (901) 385-6451
	Email: rmccclanahan@cityofbartlett.org

Summary of Findings and Comments

On Tuesday, April 7, 2015, Eddy Bouzeid with the Division of Water Resources, Memphis Environmental Field Office (DWR/MEFO), conducted a Compliance Evaluation Inspection (CEI) at the Bartlett Sewage Treatment Plant (STP) #1 biosolids land application site which is located in Tipton County, Tennessee. This report will include the CEI findings for the plant's biosolids operation and management. The CEI findings for the Bartlett STP are documented separately.

The purpose of the biosolids inspection is to evaluate compliance with applicable regulatory provisions, including but not limited to record keeping and reporting, treatment operations, sampling, and use or disposal practices.

Mr. Bouzeid met with Mr. Larry Gamblin, the certified wastewater operator, and reviewed the plant's biosolids monitoring records and discussed its management program. Afterwards, Mr. Bouzeid and Mr. Gamblin inspected the land application site. The following is a summary of the findings and observations:

I. Permit

In April 2004, Bartlett STP submitted to the Division a Land Application Operation Plan (LAOP) site approval request for the land application of the city's municipal biosolids at Add Van Farms (35.58194, -89.83027) in Tipton County, Tennessee. The Division reviewed the submitted information and found that the LAOP met the minimum requirements for the land application of municipal biosolids. A land application authorization site number LA8400002 was issued on May 1, 2005. The land application site was reauthorized on January 15, 2012.

The LAOP met all of the setbacks in Table 1 of the Guidelines for the Land Application and Surface Disposal of Biosolids (revised February 3, 2011) which is equivalent to the requirements set forth in Section 3.2.1 of the GP. Therefore, it is imperative that any material storage areas or land application procedures adhere to the setback requirements.

As stated in Section 2.1 of the General Permit (GP), all non-exceptional quality (non-EQ) biosolids sites that have been approved by the Division prior to May 1, 2014, will be approved under the GP upon receipt of a signed certification statement, a completed Notice of Intent (NOI), and a corresponding site approval letter.

On June 25, 2014, the Bartlett STP submitted the signed certification statement in the NOI and a copy of the site approval letter for the City of Bartlett's approved land application site number LA8400002.

On July 15, 2014, The Division issued the State Operation Permit for land application of non-EQ biosolids for the Bartlett STP with tracking number TNB066800. The permit expires on April 30, 2019.

II. Sludge Handling/Disposal

Bartlett STP wastes liquid municipal sludge from the wastewater treatment plant sludge digester, processes the sludge through a filter press to remove water, and land applies the filter cake. The filter cake (Class B biosolids) is then hauled to Add Van Farms in Tipton County for land application. The Bartlett STP runs the filter press twice a year, in the fall and in the spring. A total of approximately 50 loads (approximately 500 cubic yards of biosolids) are generated during the two filter press operations. Mr. Gamblin indicated that Bartlett is planning to run the filter press for the spring period towards the end of April 2015.

On January 30, 2015, Mr. Robert Odette, Manager of the Biosolids Program in Nashville, and Mr. Bouzeid conducted an audit of Bartlett's biosolids management. During the audit, Mr. Gamblin informed Mr. Bouzeid and Mr. Odette that the Bartlett biosolids generated in the fall of 2014 was transported to the Add Van Farms but have not been land applied, but instead has been staged onsite. Mr. Odette advised Mr. Gamblin that the recommended staging period is seven to ten days, and for long term storage, Mr. Odette strongly recommended that Bartlett adheres to the biosolids storage guidance found in EPA 40 CFR 503 rules.

In a letter to Mr. Odette dated February 4, 2015, the City of Bartlett proposed covering all biosolids taken to the application site within seven days of delivery with a plastic tarp material until ready to apply. On February 12, 2015, Mr. Odette approved the Bartlett proposal.

On February 18, 2015, and in order to comply with 40 CFR 503 and the State Operation Permit, Bartlett submitted the 2014 annual biosolids report. A copy of the report was emailed to the Division on February 18, 2015, and a hard copy was mailed to the Nashville Central Office. The report contained the information as required by Section 3.4.1 of the

GP. The report also encompassed: metals analysis, belt filter press data, description of how pathogen reduction and the vector attraction reduction were met, the weight of sludge disposed, the agronomic rate calculations, and the Certification Statement (Certification Statement #4 in the GP).

At the time of the inspection, Mr. Bouzeid reviewed the biosolids chain of custodies (COCs) and corresponding analytical results. All biosolids grab samples were collected and shipped by a Bartlett lab technician to ETC Laboratory for analysis. All data submitted in the annual report were reviewed and appeared to be complete. The COCs contained the information as required by Section 3.4.3 of the GP.

During the inspection, Mr. Bouzeid and Mr. Gamblin visited the Add Van Farms, the land application site. The inspection confirmed that the biosolids generated in the fall have not yet been land applied (photos 1 and 2) and remained in a staged area located at 35.58226, -89.8336 on the land application site. Also, it was noted that the staged material was not covered. According to Mr. Gamblin, the recent wet weather had hindered the land application of the staged biosolids since the last audit. Mr. Gamblin informed Mr. Bouzeid that the material would be land applied when weather permits and prior to the delivery of the next batch of biosolids that would be generated in the spring of 2015. Bartlett is reminded to cover any staged material until it can be land applied.

Photographic Log

Client or Facility Name:		Site Location:	Tracking No.:
Bartlett STP #1-Biosolids Application Site		Tipton County	TNB0066800

Photo No.	Date	
1	4-7-2015	
Description View of the biosolids generated in the fall of 2014 staged on the eastern portion of the Add Van Farms (35.58226, -89.8336) looking south.		

Photo No.	Date	
2	4-7-2015	
Description Another view of the biosolids staged on the Add Van Farms looking north.		